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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,284	09/25/2006	Jan Bernd Lugtenburg	304-861 (193857)	6488

30448 7590 11/19/2009  
AKERMAN SENTERFITT  
P.O. BOX 3188  
WEST PALM BEACH, FL 33402-3188

EXAMINER
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KUNDU, SUJOY K

ART UNIT	PAPER NUMBER
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2863

NOTIFICATION DATE	DELIVERY MODE
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11/19/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip@akerman.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/599,284	LUGTENBURG, JAN BERND	
	<b>Examiner</b>	<b>Art Unit</b>	
	SUJOY K. KUNDU	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/03/2009 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the term "substantially" is vague and a relative term that renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. An artisan doing measuring and testing would not know at what point "substantially" within the scope of the claim had been accomplished because nothing within the disclosure establishes when a sufficient "substantially"

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9, 11-15, 17-21 are rejected under 35 U.S.C. 103(a) as being anticipated by Takagi et al. (4,721,388) in view of Kim et al. (US 6,954,557).

With regards to Claim 1, 11, Takagi teaches a method for measuring a measurement object having at least one reference structure for defining an object-fixed object coordinate system, with the aid of a measuring system comprising at least one sensor system for recording a contour of the measurement coordinate system, the method comprising the following steps:

positioning the measurement object in a measurement position in the coverage range of the sensor system (Abstract, Column 3, Lines 41-52), wherein the measuring object is substantially rotationally symmetrical with respect to a measurement object axis (Column 4, Line 47 - Column 5, Line 3);

establishing the position of the object coordinate system by means of a reference structure (Column 4, Lines 30-32);

linking the object coordinate system with the measurement coordinate system (Figure 5, Column 4, Lines 47-53); and

processing the contour data, whilst taking account of the position of the object coordinate system in an evaluation unit (Column 4, Lines 13-26).

Takagi is silent with regards to rotating the sensor system about the measurement object for determining contour data.

Kim teaches rotating the sensor system about the measurement object for determining contour data (Column 8, Lines 11-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include rotating the sensor system about the measurement object for determining contour data as taught by Kim into Takagi for the purpose of obtaining data from all dimensions.

**Note:** With regards to the limitation of “wherein the measuring object is substantially rotationally symmetrical with respect to a measurement object axis,” this rejection is made as best understood by the Examiner.

With regards to Claim 2, 12, Takagi teaches the method wherein during the measurement, the measurement object is so fixed by a centering device that accessibility to the reference structure is not impeded (Figure 1, Column 2, Lines 55-58).

With regards to Claim 3, Takagi teaches the method wherein the measurement object is fixed in the measurement position in such a way that the reference structure is accessible for establishing the measurement object position (Figure 1, Column 2, Lines 55-58), the measurement object being substantially rotation-like with respect to a measurement object axis (Column 2, Line 60 - Column 3, Line 9), wherein the reference structure is positioned within the outer contour of the measurement object in the vicinity of the measurement object axis and a centering device for centering the measurement

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object acts on the outer contour of the measurement object (Column 2, Line 60 - Column 3, Line 9).

With regards to Claim 4, Takagi teaches the method wherein a reference device for establishing the position of the object coordinate system scans the substantially freely accessible reference structure (Column 4, Lines 30-43).

With regards to Claim 5, 13, Takagi teaches the method wherein the reference device scans in noncontacting ("light spot detecting sensor") manner the substantially freely accessible reference structure (Column 4, Lines 30-43).

With regards to Claim 6, 14, Takagi teaches the method, wherein a reference device performs a mechanical orientation of the measurement object by means of the reference system for establishing the position of the object coordinate system. (Figure 5, Column 3, Lines 53-65).

With regards to Claim 7, 15, Takagi teaches the method wherein a shape and/or position variation of at least one measurement object surface portion provided for engagement on an object surface (Column 4, Lines 13-26).

With regards to Claim 9, Takagi teaches the method, wherein the measurement object conveyed substantially linearly between an insertion opening and a discharge opening of the measurement system (Figure 4).

With regards to Claim 17, Takagi teaches the device wherein the reference device is arranged in rotary manner substantially coaxially to a rotation axis of the sensor system (Figures 3-4, Column 3, Lines 53-65).

With regards to Claim 18, Takagi teaches the device wherein integration takes place into a conveying device, particularly a linear conveying device (Column 4, Lines 39-43).

With regards to Claim 19, Takagi teaches the device wherein there are size determination means for a basic positioning of the sensor system and/or reference device (Column 4, Lines 13-26).

With regards to Claim 20, Takagi teaches the method wherein the reference structure is measured (Column 4, Lines 13-26).

With regards to Claim 21, Takagi teaches the method wherein the measurement object is conveyed substantially perpendicular to the sensor system rotation axis (Figure 4).

With regards to Claim 22, 26, Takagi is silent with regards to the method wherein the sensor system is rotated about a rotation axis enclosed by a circumference of the measuring object.

Kim teaches the method wherein the sensor system is rotated about a rotation axis enclosed by a circumference of the measuring object (Figure 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the method wherein the sensor system is rotated about a rotation axis enclosed by a circumference of the measuring object as taught by Kim into Takagi for the purpose of obtaining data from all dimensions.

With regards to Claim 23, 27, Takagi is silent with regards to the method wherein the measurement comprises a complete rotation of the sensor system about a rotation axis.

Kim teaches the method wherein the measurement comprises a complete rotation of the sensor system about a rotation axis (Figure 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the method wherein the measurement comprises a complete rotation of the sensor system about a rotation axis as taught by Kim into Takagi for the purpose of obtaining data from all dimensions.

With regards to Claim 24, 28, Takagi is silent with regards to the method wherein the measuring object rests during the measurement.

Kim teaches the method wherein the measuring object rests during the measurement (Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the method wherein the measuring object rests during the measurement as taught by Kim into Takagi for the purpose of obtaining accurate measurements.

Claim 25, 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al (4,721,388) and Kim et al. (US 6,954,557) in view of Vanaki (US 5,793,492).

With regards to Claim 25, 29, Takagi and Kim are silent with regards to wherein the measurement object is a wheel.



Vanaki teaches wherein the measurement object is a wheel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein the measurement object is a wheel as taught by Vanaki into Takagi and Kim for the purpose of making measurements on a specific object.

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. (4,721,388) and Kim et al. (US 6,954,557) in view of Martinschledde et al. (US 2006/0158663).

With regards to Claim 8 and 16 Takagi and Kim are silent with regards to the limitation of the method wherein a marking is made on the measurement object defining a characteristic measurement point by a marking device connected to the sensor system.

Martinschledde teaches the limitation of the method wherein a marking is made on the measurement object defining a characteristic measurement point by a marking device connected to the sensor system (Paragraph 33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the limitation of the method wherein a marking is made on the measurement object defining a characteristic measurement point by a marking device connected to the sensor system as taught by Martinschledde into Takagi and Kim for the purpose of properly alignment on the measurement object to accurately measure the contour of the object.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al (4,721,388) and Kim et al. (US 6,954,557) in view of Prinzhausen et al. (US 2003/003898948).

Takagi and Kim are silent with regards to wherein measurement data of the sensor system are linked with measurement data of the reference device for determining wall thickness.

Prinzhausen teaches wherein measurement data of the sensor system are linked with measurement data of the reference device for determining wall thickness (Paragraph 22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein measurement data of the sensor system are linked with measurement data of the reference device for determining wall thickness as taught by Prinzhausen into Takagi and Kim for the purpose of accurately measuring different specification of the object.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUJOY K. KUNDU whose telephone number is (571)272-8586. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sujoy K Kundu/  
Primary Examiner, Art Unit 2863  
November 16, 2009